

METHOD, DEVICE, AND SYSTEM FOR SECURE MOTOR VEHICLE
REMOTE KEYLESS ENTRY

ABSTRACT

Methods and apparatus are provided for sending an encrypted command message from a remote keyless entry device to a receiver in a motor vehicle. The method comprises defining a key generating key within
5 the remote keyless entry device, and using that key generating key to generate a working key. The working key is transmitted from the remote keyless entry device to the receiver during a training session without transmitting the key generating key. The working key is modified each
10 time the remote keyless entry device is placed in the training mode. After the training session, a message encrypted with the working key can be transmitted from the remote keyless entry device to the motor vehicle receiver where the encrypted message is decrypted with the working key.